The University of Montana

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EXHIBIT 2
DATE 2/3/09
HB 2

January 29, 2009

Representative Dan Villa
Montana House of Representatives
PO Box 200400
Helena, MT 59620-0400

Dear Representative Villa:

Enclosed is a brief report on the goals and objectives of the Montana Forest and Conservation Experiment Station (MFCES) for the 2011 biennium as requested of me per your letter of January 27, 2009. I appreciate the opportunity for us to describe our work and our aspirations to improve our service to the citizens of Montana.

We are grateful for the attention and continued support to MFCES provided by the Montana Legislature, as we firmly believe that our efforts are critical in understanding how we can best use and sustain Montana's forests for generations to come.

Please contact me if you desire any further information or clarifications on our report.

Sincerely,

James A. Burchfield
Interim Director
Montana Forest and Conservation Experiment Station

Montana Forest and Conservation Experiment Station:
Goals and Objectives for the 2011 Biennium

Introduction

The Montana Forest and Conservation Experiment Station (MFCES) is the state-wide agency established by the Montana Legislature in 1937 to provide research, education, and outreach on critical issues affecting Montana's forests. Administered by the Montana University System through The University of Montana's College of Forestry and Conservation, MFCES has a proud history of serving Montanans through its independent, science-based approach to difficult forest management questions. Research and demonstrations over the years have made vital contributions on effective ways to grow timber, promote forest health, protect clean water, and sustain high-quality wildlife habitat. Work conducted through the MFCES will continue to generate opportunities for high-wage jobs, a diverse economy, and a superior quality of life for the people of Montana.

MFCES embraces an approach of openness and partnership with other forest landowners, schools, businesses, and public agencies across the state. It encourages joint projects and welcomes other organizations to utilize its facilities for educational and outreach purposes. The MFCES owns and manages two properties for research and outreach – the Lubrecht Experimental Forest, a 28,000 acre forest property that houses a conference center and forestry camp, and the Bandy Experimental Ranch, a 3,500 acre working ranch that provides a model for complementary management actions to sustain ecological functions and rural livelihoods.

Goals of the Montana Forest and Conservation Experiment Station

The long-standing goals of the MFCES are threefold: (1) To provide understanding and demonstration of the role and function of forests and conservation to the well-being of the people of Montana; (2) To foster educational attainment for upcoming generations of conservation leaders; and (3) To create employment opportunities for Montanans from the wise use and stewardship of forests. These goals are realized through the design and execution of research projects, the establishment of formal educational programs and workshops to disseminate the latest discoveries in forest management, and outreach to public and private partners to test and evaluate the effects and benefits of forest management operations. As new questions or concerns regarding forest management emerge, MFCES uses its solid foundation to attract additional financial resources to conduct research and outreach programs. Over the last decade, the MFCES has leveraged state resources by a remarkable ratio of over 9 to 1 via external contracts and grants, such that in any given biennium, MFCES contributes approximately $20 million to Montana's economy.

Goals and Objectives for the 2011 Biennium

For the upcoming biennium MFCES will continue its ongoing work in key areas of forest management such as the impacts of management treatments on forest health, methods to combat insect attacks, efficient logging

systems, measures to protect watersheds, and management practices to improve the full complement of native Montana wildlife. In addition, the MFCES is proposing action on two new, critical areas affecting forests: (1) The impact of changing climate on Montana's forests, farms, and rangelands; and (2) The means to use forests while protecting Montana residents from wildfire within the Wildland Urban Interface.

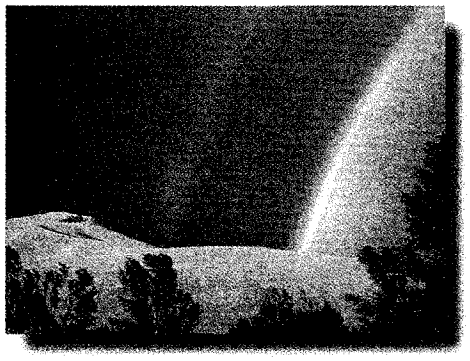
Support for a Montana Climate Office

MFCES is requesting $165,000 over the next biennium to support the state's economy through the firm set up and strengthening of a State Climate Office.

Goal: Provide Montana ranchers, farmers, forest owners, and citizens with easily accessible, reliable, high-quality information on climate trends, moisture availability, and climate impacts that focus on Montana needs.

Objective 1: Establish in the Montana Climate Office by the end of 2009, an expanded, user-friendly web presence that is linked to all forms of appropriate climate and moisture data, continuously updated and tailored to the interests of Montana landowners.

Objective 2: By the end of 2009 create an ongoing outreach program that joins the Montana Climate Office with other state agencies and services, such as the Extension Service, to identify climate trend data needs of Montana landowners and deliver necessary information to a broad range of users



Rationale for the Initiative

Climate change affects Montana through rising temperatures and shorter winters, persistent summer droughts and changes in the resiliency of plant and animal communities. Ranchers, farmers, residents of cities and towns, and members of the tourism community are feeling the effects of these changes. Montana currently has no capability to develop climate measures or conduct locally relevant climate change analysis to understand the potential impact of these changes on Montana's economy. Additionally, Montana lacks a means to transfer needed climate information to all the affected individuals, businesses, and agencies that need real-time, accurate information and maps to respond and adapt to climate changes. To be forewarned is to be forearmed.

A PhD level bio-meteorologist coupled with an outreach specialist would be able to develop new climate measures and indicators for the state and update them regularly. They would be able to develop trustworthy state maps of growing seasons, heating and cooling days, energy forecasting, irrigation demand, solar loading, wind potential, and averages and extremes of temperature and precipitation. More importantly, they would provide the tools and access to get this information into the hands of those who need it most. Although a skeletal Montana Climate Office is already hosted by the MFCES, it is unfunded and inadequate for Montana's needs.

Implementation of the Initiative

Funding of the initiative would allow for the support of a PhD bio-meteorologist and a Masters-level outreach coordinator to develop and provide the needed interactive tools and products from the State Climate Office. This small staff would work with other climate research and information resources nationwide to create an accessible, user-friendly web presence that offers real-time data and analysis on climate changes and impacts to all Montanans. Outreach activities would utilize existing extension offices and other agency capabilities to sponsor workshops and generate educational materials for all Montanans to receive critical information on climate trends and their implications to investments and land use decisions. Office space and administrative support would be provided by existing MFCES resources to increase efficiency and direct all new resources to useable products for Montana residents and businesses.

Support for Improved Uses of Forests in the Wildland Urban Interface for Biofuels and Fire Risk Reduction

MFCES is requesting $200,000 over the next biennium to improve the use of Montana's forests through the initiation of a forestry, wildland fire, and biofuels applied research program on the wildland urban interface in Montana.

Goals: (1) Increase the use of forests in Montana to support Montana forest industries by finding efficient ways to utilize Montana forests in the wildland-urban interface that include biofuels for energy; and (2) Reduce the risk from wildfire to Montana rural residents in the wildland urban interface while lowering the cost of fire suppression.

Objective 1: By summer 2010 establish research projects and demonstration areas on methods to increase efficiencies in the harvest, transport, and utilization of forest fuels in forest types common in the wildland urban interface.

Objective 2: Explore and describe by mid 2010 the economic potential of biofuels for Montana energy needs.

Objective 3: Synthesize existing research and apply new discoveries on methods to relieve wildfire risk and improve cost-savings for fire suppression organizations by the end of 2010.



Rationale for the Initiative

Many Montana residents live within the wildland-urban interface (sometimes called the "WUI"), where frequent wildfires present risk to their homes and infrastructure. There are numerous opportunities across the state to provide science-based forest treatments in the WUI to help reduce fire risk while improving the vigor, productivity, and beauty of these forests. Simultaneously, the use of the wood products that emerge from the WUI provide substantial biomass that can be converted to energy (as biofuels) for homes, schools, or other energy needs. Yet the design of WUI treatments, the needs for ongoing maintenance, the ecological impacts, and the economic potential for biofuels can vary greatly depending on specific resource conditions or locations. There is a critical need to develop, test, and communicate operational guidelines for efficient and effective treatments across the varied WUI landscape.

Greater knowledge of potential WUI treatments and their benefits would offer forest landowners confidence that their diverse range of objectives could be fulfilled. Science-tested methods to improve the harvesting and utilization of wood products and other woody biomass from the WUI would allow timber operators to increase the number of treatments across Montana, creating additional jobs and income. The active treatment of forests with high fuel loadings within the WUI would mitigate the impacts from high intensity wildfires, reduce the cost of wildfire suppression and provide additional protection from wildfire risk to WUI residents.

Implementation of the Initiative

Financial support to the WUI initiative will allow the establishment of timely research projects and science-based techniques to improve harvest operations and increase the profitability of forest operations. Implementation needs include support to a PhD-level forest researcher to coordinate the research program and develop outreach materials and workshops to distribute research findings. Demonstration areas will be established at Lubreacht Forest and other locations among cooperating landowners to allow innovations to be adopted in multiple locations across the state. Closer linkages with potential partners among fire suppression organizations and the existing forest stewardship network will be encouraged by the development of materials and web-based products that identify treatment opportunities and the economic implications of the utilization of biofuels. Application of research findings will also be advanced by the additional training made available to students at The University of Montana on these WUI treatment opportunities.

James Burchfield
Interim Director
MFCES
January 30, 2009